



# Digital Multi-Range 3Ø Voltage Monitor

# DPM- MRTU

5 Amps @ 30VDC

## Specifications

### Electrical

**Line Voltage:** 115 to 277VAC, 1Ø  
200 to 600VAC, 3Ø

**Supply Voltage:**  
12VDC, 24VDC, 24VAC, 120VAC  
& 240VAC, 1Ø

**Frequency:** 50/60Hz

### Display:

16 Character, 2 line,  
LCD back lighting

### Adjustments:

Membrane Buttons & Display

**Modbus Unit Addresses:** 1 to 247  
(default unit address is 49)

**Over/Under Voltage:** Adj. 7% to 15%

**Phase Imbalance:** 3% to 10%

**Phase Rotation:** A - B - C

### Delays:

Trip Delay: Adj. 2 sec. to 10 sec.

Reset Delay:

Adj. Manual Reset to 5 mins.

**Power Consumption:** 2.1VA

### Output Contacts:

SPDT (Single Pole Double Throw)

10 Amps @ 120VAC

6 Amps @ 277VAC

1/8 HP @ 120/277VAC

### Communications Output: Modbus-RTU

Accuracy: ±1%

Baud Rate: 19.2K

Parity: None

Data: (Function Code 3) REGISTER ADDRESS UNITS

*Voltage Selected* 0x0000 (22 selectable voltages)

L1-L2 (S1-S2) 0x0001 1.0 Volt

L2-L3 0x0002 1.0 Volt

L3-L1 0x0003 1.0 Volt

Average Voltage 0x0004 1.0 Volt

% Imbalance 0x0005 0.1%

Output 0x0006 0=Off

1=On

Crest Factor 0x0007 1%  
(100 is no error)

(Contact factory for complete set of register addresses and values.)

### Physical

#### Termination:

Line Voltage: (3) 0.25" Push-On Tabs or Pluggable Blocks

Output Contacts:

(3) 0.187" Push-On Tabs or Pluggable Blocks

Supply Voltage:

(2) 0.187" Push-On Tabs or Pluggable Blocks

ModBus: (3) Pluggable Terminal Block

**Packaging:** Surface mounting with Epoxy fill  
5" x 3" x 2"



### Voltage Ranges:

- 115 to 277VAC, 1Ø
- 200 to 600VAC, 3Ø

### Digital Display:

- Line Voltages
- Frequency
- Imbalance %
- Output Relay Status
- Last 4 Faults
- Set-Up Menus

### ModbusRTU

### SPDT Contacts

### Operation

With the supply voltage applied to the DPM, the DPM will monitor the line voltages (single or three phase). If the voltages are within the operator selectable parameters, the output relay will be energized. If the line voltages drift outside the selectable parameters, the output relay will be de-energized with the opportunity to disconnect sensitive equipment from the line voltage until the problem is corrected.

The ModbusRTU option allows the line voltages and all of the settings to be transferred to a controller or building automation system. The DPM also allows for the controller to select/change the line voltage the DPM is being set for.

## Ordering Information

### DPM - 24A - MRTU - T -



R-K Model

#### Supply Voltage

12D - 12VDC

24D - 24VDC

24A - 24VAC

120A - 110-120VAC

240A - 208-240VAC

#### MRTU

(Modbus-RTU)

#### Special

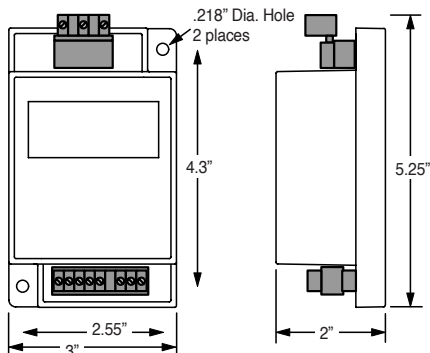
XXXX - Special

#### Termination

T - Tabs

B - Terminal Blocks

## Dimensions



## Connections

